Washington State Department of Health

ELABORATIONS

News and Issues for Washington's Clinical Laboratories

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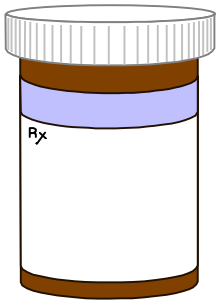
Continuing Concern over Antibiotic Resistance Prompts Extended Public Education Campaign

by Jac Davies, MPH

In 1998 health officials in Washington became alarmed when results from a new surveillance system showed that bacterial resistance to common antibiotics had increased dramatically. Between 1997 and 1998, 24% of *Streptococcus pneumoniae* isolates reported through the surveillance system had decreased susceptibility to penicillin and 11% were highly resistant. In contrast, less than 3% of pneumococcal isolates collected in studies between 1992 and 1996 were highly resistant to penicillin.

According to the Centers for Disease Control and Prevention, approximately three-fourths of all outpatient antibiotics are prescribed for otitis media, sinusitis, bronchitis, pharyngitis, or nonspecific upper respiratory tract infections. Many of these prescriptions are unnecessary, as these infections are often caused by viruses rather than bacteria. Numerous studies have shown that reducing unnecessary antibiotic use also reduces antibiotic resistance.



Armed with this information and broad support from the state's infectious disease, pediatric, and family practice communities, the Department of Health began a campaign in December 1998 to educate the public and providers on appropriate use of antibiotics. The campaign was particularly focused on the pediatric outpatient population, a group known to have both high antibiotic usage and high levels of resistance.

Inside This Issue

The latest data from the statewide Drug Resistant Streptococcus Pneumoniae (DRSP) Surveillance System shows that the perceived increase in resistance levels does not appear to be rising over last year's estimate. Table 1 compares resistance patterns from the first two years of data collection. Overall, the incidence of bacterial isolates that are not susceptible to penicillin has not changed. The number of totally resistant isolates has decreased slightly, while those showing intermediate resistance have increased slightly. The CDC's nationwide active surveillance data also show this plateau of resistance during the same period. It is too early to tell whether this plateau is a long-term trend or a temporary stabilization of the DRSP incidence. Leveling of penicillin resistance is an encouraging finding and may reflect efforts to control the widespread overuse of antibiotics.

While it is not possible to connect Washington's antibiotic resistance campaign directly to the stabilization of DRSP rates, indications are that the public has heard and is beginning to understand the need for careful use of antibiotics. If public awareness continues or increases, the pressure on providers to prescribe antibiotics unnecessarily will decrease. For this reason, the Department of Health and its partners in the antibiotic resistance campaign will conduct further public education activities in 2000, including offering new patient education materials to providers and any other groups interested in this issue.

Coupled with the public education efforts, DOH is sending providers flow charts that summarize the latest recommendations from the scientific literature on judicious

continued on page 2

Concern over Antibiotic Resistance

continued from page 1

Web Sites: Information on antibiotic resistance is available from the following websites:

Centers for Disease Control and Prevention:
http://www.cdc.gov/ncidod/dbmd/antibioticresistance/default.htm
The Alliance for Prudent Use of Antibiotics:
http://www.healthsci.tufts.edu/apua/apua.html

antibiotic use for acute sinusitis/rhinitis, pharyngitis, cough illness/bronchitis, and otitis media. These flow charts have been prepared by a work group of Washington pediatricians, family practitioners, and infectious disease specialists at the request of the Association of Washington Health Plans. They summarize and cite recommended best practices in a simple one-page format.

Information Materials: If you are interested in receiving either the patient education materials or the flow charts of best practices, please contact Jac Davies at 206-361-4883 or via email: jac.davies@ doh.wa.gov

Reference: Dowell S: Principles of Judicious Use of Antimicrobial Agents for Pediatric Upper Respiratory Tract Infections. Pediatrics 1998; 101:163-184.

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Website addresses:
DOH home page: http://www.doh.wa.gov
LQA home page:
http://www.doh.wa.gov/hsqa.fsl/LQA_Home.htm

Table 1: Comparison of DRSP surveillance system results

	Surveillance Year 1997–1998	1998–1999
Overall Resistance		
Number of Isolates	300	265
	Percent	
Susceptible	77.7	77.7
Intermediate	10.7	15.5
Resistant	11.7	6.8
Total Nonsusceptible	22.4	22.3
Penicillin Resistance		
Number of Isolates	191	220
	Percent	
Susceptible	76.4	74.1
Intermediate	13.1	17.7
Resistant	10.5	8.2
Total Nonsusceptible	23.6	25.9
Extended Spectrum Cephalosporin Resistance		
Number of Isolates	191	220
	Percent	
Susceptible	89.5	90.5
Intermediate	3.7	5.0
Resistant	6.8	4.5
Total Nonsusceptible	10.5	9.5

Penicillin Minimum Inhibitory Concentration: intermediate, 0.12–1 ug/mL; resistant, > 2 ug/mL.
ESC Minimum Inhibitory Concentration: intermediate, 1 ug/mL; resistant, > 2 ug/mL

Websites Of Interest

Local medical review policies: http://www.lmrp.net Local medical review policy is an administrative and educational tool to assist providers, physicians and suppliers in submitting correct claims for payment. Local policies outline how contractors will review claims to ensure that they meet Medicare coverage requirements. HCFA requires that local policies be consistent with national guidance (although they can be more detailed or specific), developed with scientific evidence and clinical practice. Contractor medical directors develop these policies.

The use of local medical review policy helps avoid situations in which claims are paid or denied without a full understanding of why.

This web site will be updated on a quarterly basis; therefore, the latest version of an LMRP may not be at this site. Although HCFA is working with contractors to develop the format of these policies, we can not guarantee the accuracy or format of the individual contractor policies presented on this web site. Each contractor will have the latest, up-to-date version of their LMRPs on their web site. A listing of contractor LMRP web sites is being developed by HCFA and will be available on their site when completed.

Medicare Web Sites: http://www.noridian.com/medweb/medicare-websites.html This website lists the web sites for Medicare contractors. It is the goal of this website to place links for all Medicare contractors on this page as they become available.

Laboratory-Based Practice Guidelines

A critical area of concern in the current cost-conscious health care environment is optimization of service delivery. Over-utilization of laboratory testing can lead to needless and costly treatment for the patient. Under-utilization can result in a misdiagnosis and delays in treatment. To address inappropriate or unnecessary use of laboratory testing services, the Clinical Laboratory Advisory Council decided to establish a process for developing practice guidelines for clinical laboratory testing. The guidelines are for educational purposes only.

The intent of the guidelines is to help laboratorians answer questions they may get from clinicians on appropriate test ordering. The guidelines will also be useful to clinicians as a review of a typical test-ordering pattern for asymptomatic patients. The guidelines are a compilation of existing data, not original work by the Council. For the format, the Council elected to summarize existing information into simple, easy-to-use flow charts. Once a test has been identified by the Council as a candidate for a guideline, a Council workgroup is formed to develop a proposed guideline. The draft guideline is reviewed by the entire Council, members of the state's laboratory community, and appropriate medical professional societies. Comments from the reviewers are evaluated by the Council workgroup and incorporated into the final document. The finalized guideline is disseminated to all clinical laboratories and other interested parties through this newsletter.

FOR EDUCATIONAL PURPOSES ONLY!

The guidelines should be used strictly as guidelines. The individual clinician is in the best position to determine which tests are most appropriate for a particular patient.

Guidelines developed by the Council that have been previously published in E**LAB**ORATIONS include screening guidelines for ANA, chlamydia, coagulation guideline for unexplained bleeding disorders, diabetes, hepatitis, HIV, lipid, PSA, STD, TB, thyroid, urinalysis microscopic and culture, and wellness screening. This issue of E**LAB**ORATIONS contains the guideline for the laboratory evaluation of anemia in adults.

Practice Guideline Ideas

The Clinical Laboratory Advisory Council is soliciting ideas for developing additional laboratory based practice guidelines. If you have ideas for additional guidelines, please send them to the mailing address found on page 2 or to the following e-mail address:

leonard.kargacin@doh.wa.gov

The Advisory Council appreciates your input.

Calendar of Events

PHL Training Classes:

Examination of Urine Sediments

May 24	Shoreline
May 25	Shoreline

Northwest Medical Laboratory Symposium

October 18-21	Tacoma

7th Annual Clinical Laboratory Conference

November 13	Seattle

Contact information for the events listed above can be found on page 2. The Calendar of Events is a list of upcoming conferences, deadlines, and other dates of interest to the clinical laboratory community. If you have events that you would like to have included, please mail them to ELABORATIONS at the address on page 2. Information must be received at least one month before the scheduled event. Editors reserve the right to make final decisions on inclusion.

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